



SAFETY DATA SHEET

Product: MARC 157 SPOT OUT

Form R04132

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER AND NAME: MARC 157 SPOT OUT

SDS DATE: 4/10/15

SUPPLIER: Mid-American Research Chemical Corp. ADDRESS: P. O. Box 927 Columbus, NE 68602-0927
PHONE: 402-564-7104 FAX: 403-563-1290
EMERGENCY PHONE: InfoTrac 1-800-535-5053
E-MAIL: marc@marc1.com WEBSITE: www.marc1.com

RECOMMENDED USE: Carpet Spotter

PREPARED BY: MARC

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION: May cause temporary eye irritation. Extremely flammable aerosol.

SIGNAL WORD AND PRECAUTIONARY STATEMENTS: DANGER: Extremely flammable aerosol.

Prevention: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Response : Wash hands after handling.

Storage: Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal : Dispose of waste and residues in accordance with local authority requirements.



POTENTIAL HEALTH EFFECTS: See Section 11 for more information.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>%WT.</u>
Butane	106-97-8	2.5-10
Propane	74-98-6	1-2.5
Diethylene Glycol Monoethyl Ether	111-90-0	2.5-10
Isopropyl Alcohol	67-63-0	2.5-10

Other components below reportable levels. 60-80

#: This substance has workplace exposure limit(s).

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Composition comments: The full text for all R-phrases is displayed in Section 16 of SDS.

SECTION 4: FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Continue rinsing. Get medical attention immediately.

SKIN: Take off immediately all contaminated clothing. Remove and isolate contaminated clothing and shoes. Immediately flush skin with plenty of water. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.

INGESTION: Immediately call a POISON CENTER or doctor/physician. Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

INHALATION: If inhalation of gas/fume/vapor/dust/mist from the material is excessive (air concentration is greater than the TLV or health effects are noticed), immediately remove the affected person(s) to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Call a physician or Poison Control Center immediately. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician if symptoms develop or persist.



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MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE & DELAYED: Direct contact with eyes may cause temporary irritation.

INDICATION OF IMMEDIATE MEDICAL ATTENTION & SPECIAL TREATMENT NEEDED: Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

GENERAL INFORMATION: If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Alcohol resistant foam. Water fog. Dry chemicals. Carbon dioxide (CO₂).

UNSUITABLE EXTINGUISHING MEDIA: Do not use water jet as an extinguisher, as this will spread the fire.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

FIRE-FIGHTING EQUIPMENT/INSTRUCTIONS:
Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

SPECIFIC METHODS: Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. In the event of fire and/or explosion do not breathe fumes.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Extremely flammable aerosol. Contents under pressure. Pressurized container may explode when exposed to heat of flame. During fire, gases hazardous to health may be formed.

HAZARDOUS DECOMPOSITION PRODUCTS: No hazardous decomposition products are known.

SECTION 6: ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES: Consider initial downwind evacuation for at least 500 meters (1/3 mile). Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained.

PROTECTIVE EQUIPMENT: See Section 8 Exposure Controls/Personal Protection.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. If possible, turn leaking containers so that gas escapes rather than liquid. Isolate area until gas has dispersed. Prevent entry into waterways, sewer, basements or confined areas. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS. This material and its container must be disposed of as hazardous waste.

ENVIRONMENTAL PRECAUTIONS: Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.



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SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR

SAFE HANDLING:

Vapors may form explosive mixtures with air. May be ignited by open flame. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid prolonged exposure. Do not get this material on clothing. Do not use in areas without adequate ventilation. Wear positive pressure self-contained breathing apparatus (SCBA). Wear appropriate personal protective equipment. Wash thoroughly after handling. Observe good industrial hygiene practices.

OTHER PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN! CONTENTS UNDER PRESSURE!

STORAGE:

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122°F. Do not puncture, incinerator or crush. Do not handle or store near an open flame, heat, or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in well-ventilated place. Refrigeration recommended. Store away from incompatible materials (see Section 10 of SDS). Level 1 Aerosol (NFPA 30B).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

COMPONENTS	TYPE	VALUE	FORM
Propane (74-98-6)	PEL	1800 mg/m ³ 1000 ppm	
Isopropyl Alcohol (67-63-0)	PEL	980 mg/m ³	

US. ACGIH Threshold Limit Values

COMPONENTS	TYPE	VALUE
Butane (CAS 106-97-8)	STEL	1000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

COMPONENTS	TYPE	VALUE
Butane (CAS 106-97-8)	TWA	1900 mg/m ³ 800 ppm
Propane (74-98-6)	TWA	1800 mg/m ³ 1000 ppm
Diethylene Glycol Monoethyl Ether (111-90-0)	TWA	140 mg/m ³

Biological limit values: No biological exposure limits noted for the ingredient(s).

APPROPRIATE ENGINEERING CONTROLS: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure adequate ventilation, especially in confined areas.



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- VENTILATION:** Good general ventilation
- RESPIRATORY PROTECTION:** If permissible levels are exceeded use NIOSH mechanical filter/organic vapor cartridge or an air-supplied respirator.
- EYE/FACE PROTECTION:** Face shield is recommended. Wear safety glasses with side shields (or goggles).
- SKIN PROTECTION/PROTECTIVE GLOVES:** Wear chemical resistant gloves.
- OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Also wear thermal protective clothing, when necessary.
- WORK HYGIENIC PRACTICES:** When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- APPEARANCE:** Clear
- PHYSICAL STATE:** Aerosol, gas
- COLOR:** White
- ODOR:** Mild ammoniacal
- ODOR THRESHOLD:** Not available.
- pH:** 9-10
- MELTING/FREEZING POINT:** Not available.
- INITIAL BOILING POINT/RANGE:** 210°F (98.92 °C) estimated
- FLASH POINT/METHOD USED:** -156.0 °F (-104.4 °C) Propellant estimated
- EVAPORATION RATE:** Not available.
- FLAMMABILITY (solid, gas):** Not available
- FLAMMABILITY LIMITS:** 12% upper
- VAPOR PRESSURE (mmHg):** Not available.
- VAPOR DENSITY (AIR = 1):** Not available
- SPECIFIC GRAVITY (H₂O = 1):** 0.941
- SOLUBILITY IN WATER:** Not available

- PARTITION COEFFICIENT, n-OCTANOL/WATER:** Not available
- AUTO-IGNITION TEMPERATURE:** 797 °F
- DECOMPOSITION TEMPERATURE:** Not available
- VISCOSITY:** Not available

SECTION 10: STABILITY AND REACTIVITY

- REACTIVITY:** The product is stable and non-reactive under normal conditions of use, storage and transport.
- CHEMICAL STABILITY:** Material is stable under normal conditions.
- POSSIBILITY OF HAZARDOUS REACTIONS:** No dangerous reaction known under conditions of normal use. Hazardous polymerization does not occur.
- CONDITIONS TO AVOID:** Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible material.
- INCOMPATIBILITY (MATERIAL TO AVOID):** Strong oxidizing agents. Fluorine. Isocyanates.
- HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** No hazardous decomposition products are known.
- HAZARDOUS POLYMERIZATION:** Does not occur. **CONDITIONS TO AVOID (POLYMERIZATION):** NA



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SECTION 11: TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE:

EYES: Direct contact with eyes may cause temporary irritation.

SKIN: No adverse effects due to skin contact are expected.

INGESTION: Expected to be a low ingestion hazard.

INHALATION: Prolonged inhalation may be harmful.

ACUTE HEALTH HAZARDS: Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

CHRONIC HEALTH HAZARDS: N/A

SIGNS & SYMPTOMS: Direct contact with eyes may cause temporary irritation.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Dermatitis. Skin allergies.

PRODUCT	SPECIES	TEST RESULTS
M-157 Spot Out		
ACUTE		
<i>Dermal</i>		
LD50	Guinea pig	822249 mg/kg
	Rabbit	58291mg/kg, 2 hrs. est.
<i>Inhalation</i>		
LC50	Rat	5111 mg/l, 4 hrs. est.
	Mouse	17732 mg/l, 2 hrs. est.
LC100	Cat	1290
Oral LD50	Guinea pig	69115 mg/kg est.
	Mouse	83878 mg/kg est.
	Rabbit	78067 mg/kg est.
	Rat	84 g/kg est.

COMPONENTS	SPECIES	TEST RESULTS
Butane (CAS106-97-8)		
ACUTE		
<i>Inhalation</i>		
LC50	Mouse	1237 mg/l, 120 Minutes
		52%, 120 Minutes
	Rat	1355 mg/l
Propane (CAS 74-98-6)		
ACUTE		
<i>Inhalation</i>		
LC50	Mouse	1237 mg/l, 120 Minutes
		52%, 120 Minutes



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	Rat	1355 mg/l
		658 mg/l/4h
Diethylene Glycol Monoethyl Ether (CAS 111-90-0)		
ACUTE		
<i>Dermal</i>		
LD50	Rabbit	8500 mg/kg, 2 hrs.
	Guinea pig	5900 mg/kg, days
Oral LD50		
	Rabbit	5600 mg/kg
	Rat	5600 mg/kg
	Guinea pig	4970 mg/kg
	Mouse	6031 mg/kg
Isopropyl Alcohol (CAS 67-63-0)		
Acute Dermal LD50	Rabbit	16.4 ml/kg, 24 hours
Inhalation LC50	Rat	over 10000 ppm, 6 hours
Oral LD50	Rat	8.84 g/kg

*Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation:	Causes mild skin irritation.
Serious eye damage/eye irritation:	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization:	Not a respiratory sensitizer.
Skin sensitization:	May cause an allergic skin reaction.
Germ cell mutagenicity:	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity:	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):	Not listed.
Reproductive toxicity:	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity-Single exposure:	Not classified.
Specific target organ toxicity-Repeated exposure:	Not classified.
Aspiration hazard:	Not likely, due to the form of the product.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Harmful to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

PRODUCT	SPECIES	TEST RESULTS
M-157 Spot Out Mixture		
Aquatic		
Algae	IC50	Algae 1863 mg/L, 72 Hours
Crustacea	EC50	Daphnia 1209 mg/L. 48 Hours



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Fish LC50 Fish 6366 mg/L, 96 Hours

COMPONENTS	SPECIES	TEST RESULTS
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Diethylene Glycol Monoethyl Ether (CAS #111-90-0)

Aquatic

Fish LC50 Bluegill (*Lepomis macrochirus*) over 10000 mg/l, 96 Hours

Isopropyl Alcohol (CAS #67-63-0)

Fish LC50 Bluegill (*Lepomis macrochirus*) over 1400 mg/l, 96 Hours

Algae IC50 Algae 1000 mg/l, 72 Hours

Crustacea EC50 Daphnia 13299 mg/l, 48 hours

*Estimates for product may be based on additional component data not shown.

Persistence and degradability: No data is available on the degradability of this product.

Bioaccumulative potential: No data available.

Partition coefficient n-octanol / water (log Kow)

Butane	2.89
Propane	2.36
Diethylene Glycol Monoethyl Ether	-0.54
Isopropyl Alcohol	0.05

Mobility in soil: No data available.

Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. This material and its container must be disposed of as hazardous waste. Incinerate the material under controlled conditions in an approved incinerator. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations.

LOCAL DISPOSAL REGULATIONS: Dispose in accordance with all applicable regulations.

WASTE FROM RESIDUES/

UNUSED PRODUCTS: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see Disposal instructions).

CONTAMINATED PACKAGING: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (for ground/non-bulk containers)

CONTAINER SIZE(S):	Aerosol Can (18 oz.)
PROPER SHIPPING NAME:	CLEANING COMPOUND
HAZARD CLASS:	N/A
ID NUMBER:	None
PACKING GROUP:	None
LABEL STATEMENT:	LTD QTY

SECTION 15: REGULATORY INFORMATION



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U.S. FEDERAL REGULATIONS: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA (TOXIC SUBSTANCE CONTROL ACT): Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4):
Not listed.

SARA 304 EMERGENCY RELEASE NOTIFICATION:
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA)

Hazard categories
Immediate Hazard – No
Delayed Hazard – No
Fire Hazard – Yes
Pressure Hazard – No
Reactivity Hazard - No

SARA 302 extremely hazardous substance:
Not listed.

SARA 311/312 Hazardous chemical:
No

SARA 313 (TRI reporting):
Not regulated.

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112 Accidental Release Prevention (40 CFR 68.130)
Butane (CAS 106-97-8)
Propane (CAS 74-98-6)

Safe Drinking Water Act (SDWA) Not regulated.

US. California Proposition 65
WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

International Inventories

<u>Country(s) or region</u>	<u>Inventory name</u>	<u>On Inventory (yes/no)*</u>
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

SECTION 16: OTHER INFORMATION

HMIS/NFPA Ratings: Health = 0
Flammability = 2
Reactivity = 0
Other = -
Protection = B



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N/A = Not Applicable, N/D = Not Determined, N/E = Not Established

DISCLAIMER: While the information contained herein is believed to be correct, no warranties are made with respect thereto, and all liability from reliance thereon is disclaimed.